Solutions that use colors (and they do exist) can only work for a specific coloring of the cube. The notation scheme used in this book is independent of color and will work for any coloring and any manufacturer's cube.

On the other hand, this solution does not use the fewest number of moves possible. It was intentionally designed for clarity and involves the least number of uncomplicated decisions rather than the fewest number of moves. There are many stages at which reducing the number of moves is possible, and these are given as short cuts. Nevertheless, with practice, it is possible to solve random arrangements of cubes in under 3 minutes.

If you would like a few hints before trying to solve a cube problem, read only pages 21 to 23.

Now enjoy your impending victory over that infernal cubel

## **ABOUT THE RUBIK'S CUBE:**

## A brief history

This fascinating puzzle was designed by Ernö Rubik, an architect and teacher in Budapest, Hungary. It was apparently designed independently by Terutoshi Ishige, an engineer in Japan. Both applied for patents in the mid-197Os. Professor Rubik designed the cube as an aid to his students in recognizing spatial relationships in three dimensions.

If you have already experimented with solving the puzzle, you may wish you could follow the movements in three dimensions more easily. It is challenging, to say the least, to establish the relative positions of the small cubes after only 2 turns of different faces.

The cubes were first manufactured in Hungary and became available in Europe in 1978. It is only recently that they have now achieved their substantial worldwide popularity (many millions sold!). They have been widely available in the United States only since 1980. It seems that these cubes were almost as common as ornaments during the 1980 holiday season.